

Claim Amendments

The following listing of the claims replaces all prior versions and listings of the claims in the application.

1. (Currently Amended) A cutting insert, comprising:

a top surface comprising at least four convex cutting edges;

a bottom surface with a perimeter that is less than the perimeter of the top surface;

~~at least four convex cutting edges;~~

at least one conical clearance surface adjacent to at least one of the convex cutting edges extending between the top surface and bottom surface; and nose corners connecting the at least four convex cutting edges.

2. (Original) The cutting insert of claim 1, wherein the cutting insert has four convex cutting edges.

3. (Canceled)

4. (Original) The cutting insert of claim 3, wherein each of the nose corners comprises at least one of a circular arc, a series of circular arcs, and a multi-segment spline curve.

5. (Original) The cutting insert of claim 1, wherein the convex cutting edges comprise a circular arc.

6. (Original) The cutting insert of claim 2, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to two times a radius of the largest circle that may be inscribed on the top surface.

7. (Original) The cutting insert of claim 2, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to five times a radius of the largest circle that may be inscribed on the top surface.
8. (Original) The cutting insert of claim 2, wherein the convex cutting edges comprise a circular arc with a radius greater than or equal to ten times a radius of the largest circle that may be inscribed on the top surface.
9. (Original) The cutting insert of claim 5, wherein the convex cutting edges further comprise at least one substantially straight line.
10. (Original) The cutting insert of claim 6, wherein the convex cutting edge comprises two substantially straight lines.
11. (Original) The cutting insert of claim 6, wherein the convex cutting edge comprises three substantially straight lines.
12. (Original) The cutting insert of claim 1, wherein the convex cutting edges comprises at least one of a circular arc, a portion of an ellipse, a portion of a parabola, a multi-segment spline curve, a straight line.
13. (Canceled)
14. (Original) The cutting insert of claim 1, further comprising a conical clearance surface between the top surface and the bottom surface.
15. (Original) The cutting insert of claim 1, further comprising chip breaking geometry on the top surface.
16. (Previously Presented) A cutting insert, comprising:
 - a top surface comprising at least four convex cutting edges, wherein the cutting edges comprise a circular arc portion and at least one straight portion;
 - a bottom surface with a perimeter that is less than the perimeter of the top surface;

~~at least four cutting edges, wherein at least a portion of at least one cutting edge is in the shape of an arc or a portion of an ellipse and the cutting edges are substantially parallel to the bottom surface;~~

at least one conical clearance surface adjacent to at least one of the convex cutting edges and extending between the top surface and the bottom surface;
and

nose corners connecting the at least four convex cutting edges.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Previously Presented) The cutting insert of claim ~~19~~16, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to two times a radius of the largest circle that may be inscribed on the top surface.

21. (Previously Presented) The cutting insert of claim ~~19~~16, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to five times a radius of the largest circle that may be inscribed on the top surface.

22. (Previously Presented) The cutting insert of claim ~~19~~16, wherein the convex cutting edges comprise a circular arc with a radius greater than or equal to ten times a radius of the largest circle that may be inscribed on the top surface.

23. (Canceled)

24. (Previously Presented) The cutting insert of claim ~~23~~16, wherein the convex cutting edge comprises two substantially straight lines.

25. (Previously Presented) The cutting insert of claim 24, wherein the convex cutting edge comprises three substantially straight lines.

26. (Canceled)

27. (Previously Presented) The cutting insert of claim 16, further comprising chip breaking geometry on the top surface.